

**commodore**  
**international limited**



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CONFIDENTIAL

PRESENTATION ON  
COMMODORE INTERNATIONAL LIMITED  
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## EXECUTIVE SUMMARY

### Introduction

1. Microcomputers have developed into one of the fastest growing worldwide industries. The high end (small business/professional) of the industry is only five years old and already sales have topped \$5 billion on an annual basis. Worldwide growth rates have averaged in excess of 100%; this growth is expected to "moderate" to 50-60% per annum until at least 1990. Four companies dominate the market: IBM, Apple, Tandy and Commodore.

2. Commodore dominates the worldwide in-home/educational market. From a standing start in early 1981, this market generated 1983 revenues in excess of \$2 billion in hardware and an additional \$600 million in software. Growth rates are estimated at 50% per annum through the rest of 1980's.

3. Commodore is the industry pioneer and a technological leader. It has sold more microcomputers worldwide than any other company. Its MOS Technology division designed the 6500 series microprocessors. In 1977 the company introduced its PET computer for \$795 and the personal computer revolution was born. Shortly thereafter, Apple and Atari, using Commodore's 6500 microprocessors, introduced competing products. Other MOS semiconductors have enabled the company to introduce technologically superior products ahead of the competition. The VIC 20 was the world's first color computer under \$300, and the Commodore 64 offers as much memory as the Apple II and IBM PC models costing three times as much while offering superior graphics and sound capabilities.

4. An emerging lucrative area is the marketing of software products. Commodore is uniquely qualified to penetrate and dominate this market as well, with the industry's largest installed base of 4 million microcomputers and the current selling rate in excess of 2 million annually. Its software division of 20 software writers and the ability to publish for others under the Commodore label in return for license fees is expected to add \$200 million annually in new high margin sales in the next two years. Thereafter it is the goal of Commodore to have software sales equal to 15% of total sales.

5. Commodore's manufacturing capabilities have been the key to its success. It controls its costs by designing, assembling and manufacturing most of its own microprocessors and ROMs (read only memories), boards, subassemblies and peripherals. Most labor intensive assembly occurs in Hong Kong and Japan. More importantly, its vertical integration allows chip and systems design to occur simultaneously, allowing faster introduction and manufacture of new products. Many of Commodore's computers utilize common components and subassemblies allowing high incremental margins on new products.

Commodore is the industry's lowest cost producer. This has proven invaluable in a market that is extremely price elastic and competitive.

6. The revenues and pretax profits of Commodore for the year ended 6/30/83 were \$681 million and \$88 million, respectively, up 124% and 117% from the prior year and continuing the increasing pattern of growth since the company entered the microcomputer field. Over the previous five years (fiscal 1979-1983), sales have grown at a 71% annual rate while profits have expanded at 91% per annum. In its current fiscal year Commodore's success has continued: For the nine months ended 3/31/84 sales increased 106% to \$966.9 million while net profit grew by 81% to \$110.7 million.

7. This year Commodore introduced new computers for both its home and business markets. The home computer (Plus 4), introduced as the 264 in January, features 64K RAM, four built in software programs and is expected to retail for around \$300. Two major systems for the business market were introduced in April. Both feature 256K RAM, 80 column color graphics and built in dual floppy disk drives. One is driven by the Intel 8088 microprocessor that allows compatibility with software offered for IBM's PC while the second machine utilizes Zilog's Z-8000 microprocessor and runs on Unix based software.

## INDUSTRY

### Industry Growth & Structure

The microcomputer industry (defined by industry watchers as computer systems selling below \$10,000) began in 1977 when Commodore introduced the PET microcomputer for \$795.00. Almost immediately Tandy, Apple and Atari introduced competing products with the latter two using Commodore's 6502 microprocessor. From that standing start, worldwide sales of hardware reached \$700 million in 1980, \$1.5 billion in 1981, \$4.3 billion in 1982 and \$10 billion in 1984.

This enormous growth in what is now commonly referred to as the "personal computer" market was accompanied by the segmentation of the industry into four areas: small business, personal, home and educational. The small business-oriented microcomputer systems cost between \$2,000 - \$10,000 each. They are used for general office and accounting functions. These units normally include built-in monitors and floppy disk drives and can be purchased with printers.

Microcomputers which are used for business applications in the home or work desk at the office fall under the personal category. These units may or may not have built in displays and range in price from \$500 - \$2,000. Depending upon the uses, whether simply for data file management or complex financial spread sheets, peripherals such as floppy disk drives and printers can be added. Machines in these first two categories often overlap each other's market.

The home and educational markets are similarly lumped together. The microcomputers are generally identical machines. The in-home units are priced under \$500 and can cost as little as \$79. They are lightweight and must be connected to a monitor. They are primarily used for education and entertainment purposes. The microcomputers purchased by schools cost about \$1,000 and are similar to in-home units; they generally have built in displays. Both in-home units and school units share the availability of peripheral devices which are needed according to the machine's utility.

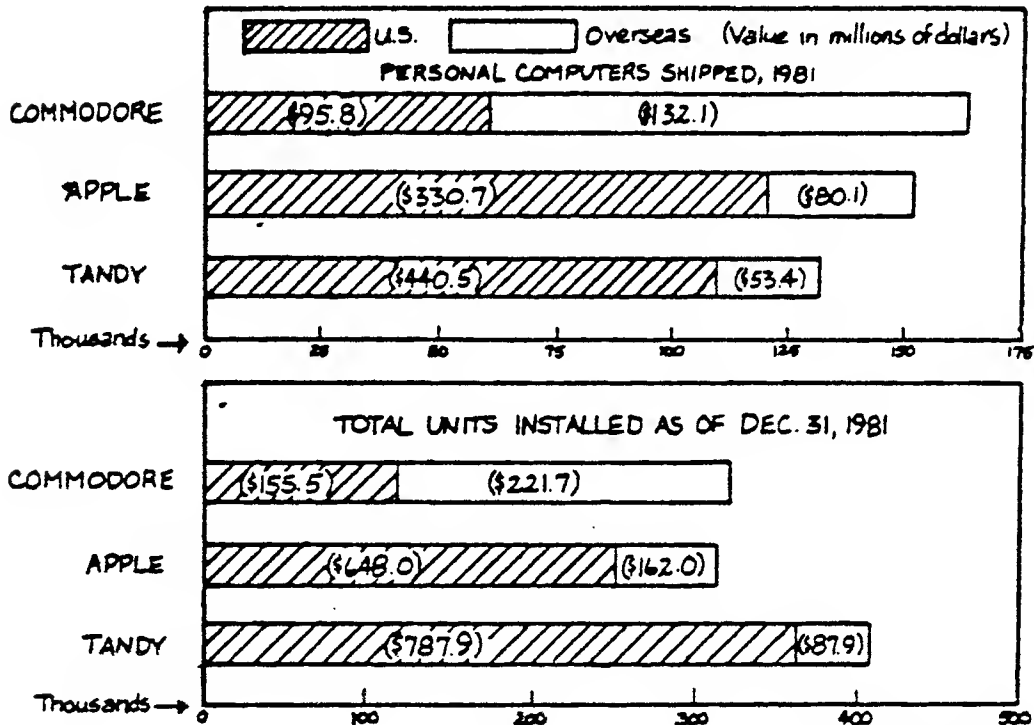
From the original four market participants, the field has grown to over 200. Entry has been easy, given the shortage of capacity of the original makers to meet demand. New participants have been able to pick a user segment and, as long as the product works, able to market their machine. Whether this continues remains to be seen; there are already signs of a shakeout, but most of the companies currently receiving attention in the press have had product or management problems.

The following discussion groups small business and professional use microcomputers and the in-home and school segments. Industry observers often refer to these two segmentations as the high and low ends.

## Small Business/Professional Market

In early 1981 there was little distinction between high and low end markets. Worldwide sales in 1981 had doubled to \$1.5 billion and 65% was controlled by Commodore, Apple and Tandy.

Table B-1



Source: International Data Corp.

In the latter half of 1981 well established, large computer firms recognized the enormous future of the personal computer market. New entries included IBM, Hewlett-Packard, Digital Equipment, Data General and Texas Instruments. In addition, the news media was forecasting the arrival of the Japanese. Several manufacturers have introduced products in both Europe and the U.S.; since their designs have consistently been more costly than the current players (especially Commodore) they have not proven to be formidable competition. In a mature market an increase in competition of so many new players might have led to price reductions and the (often predicted) demise of the original three market leaders. What did happen was a continued explosion in sales, particularly in the U.S., which accounted for 85% of 1981 worldwide volume. Sales of Apple, Tandy and Commodore continued to expand at 70%+ rates, although their market shares did drop. IBM "authenticated" the market, became the industry standard, and captured a large market share. It also made many corporations realize what a valuable tool the desk top computer could be, and IBM's production capacity (manufactured by outside vendors) has been sold out since its machine was introduced.

In 1982 a score of independent domestic and Japanese companies introduced new products (Alpha Micro, Altos, Cromenco, Convergent, Eagle, Fortune, Victor, Northstar, Osborne, Televideo, Vector Graphic, Epson, Nippon Electric, Fujitsu and Toshiba among others). Hardware sales increased 180% to \$4.3 billion while software sales approached \$1 billion. A December 1982 market survey by Future Computing estimated that 60% of personal computers were being sold to small businesses (those with less than 25 employees). Of these 3 million companies, less than 5% had any data processing systems. In addition, large companies, with an estimated 15 million managers and technical professionals, were making up an ever growing pool of potential buyers. A 1983 Future Computing market survey of Fortune 1000 customers estimated that market alone to be \$7 billion annually by 1988 with an additional \$1.5 billion in software sales.

The business/professional microcomputer market is still in its infancy. Despite its phenomenal five-year growth record, only 10% of the target markets have been penetrated. A recent Paine Webber Mitchell Hutchins personal computer study forecast a U.S. installed base in excess of 10 million professional purpose microcomputers by 1987 vs. only 5 million today. Future Computing now estimates a U.S. market of \$22.5 billion in 1987 and a worldwide market of \$35.5 billion.

Commodore, as one of the first participants should benefit from this growth. It is well positioned with its current PET/CBM line and Portable 64. While Fortune 1000 companies may be more likely to buy the IBM or Digital Equipment work stations that are compatible with their other equipment, other customers are going to compare prices and features. Commodore has always excelled in both areas. Moreover, it is the biggest supplier to the business market in Europe. It is a major supplier in Australia which also has just begun to develop. Many analysts believe sales worldwide are expected to grow at an annual rate of 40%-50% through 1990 (this estimate may well be conservative, considering rates from 1980 to the present have been in excess of 100%).

In the past, Commodore has been in the forefront in introducing products utilizing new technologies. With this ability, and a price structure well below competing products, Commodore should have growth rates at least equal to the 40-50% market growth estimate even if it "only" keeps its historical worldwide market share.

Commodore's two new introductions into the business market, its 256K Z-8000 and 8088 machines will offer the usual Commodore trademark, more computer for the money. The initial introduction of these machines will be in the European market through Commodore's established dealer network.

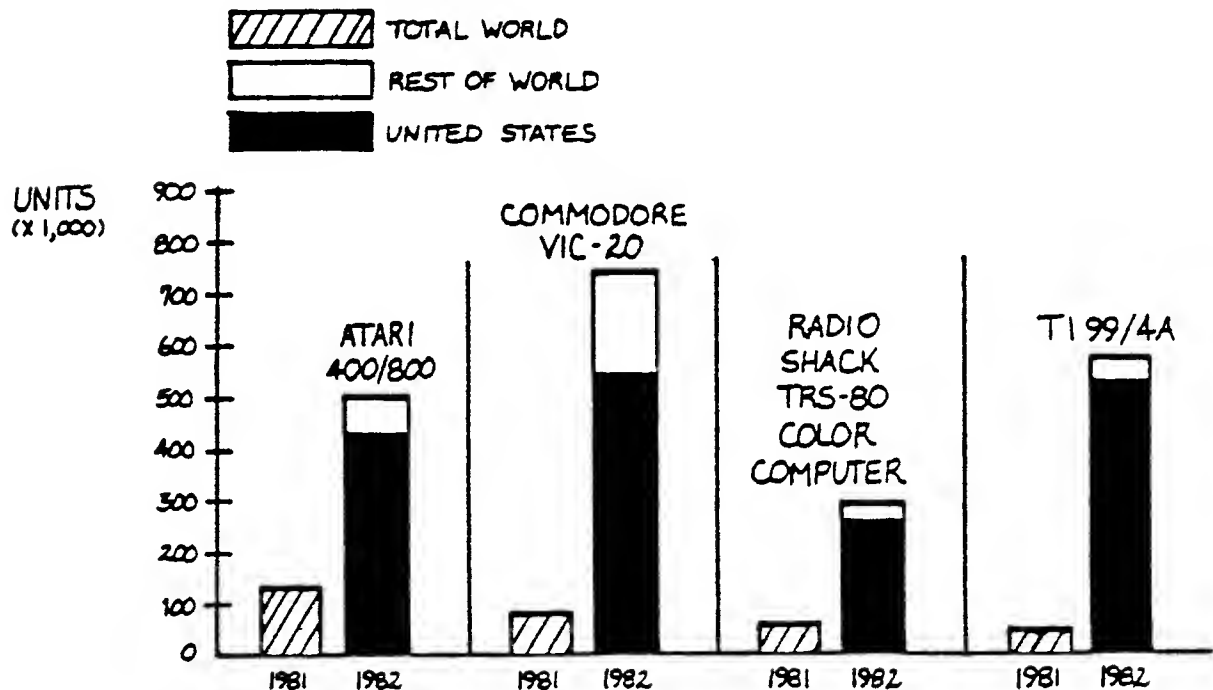
Commodore currently holds a commanding share of the European P.C. market. According to a March 1984 IDC market survey, Commodore holds the number one market position in Germany (26% market share), England, Spain, Switzerland, Norway and Austria. In addition, it holds the number two market share in Italy, Holland, Sweden and Belgium. European marketing statistics can be found on pages B-11 through B-16.

## In-home/Educational Market

In 1980 home computers were disguised in the form of video home games. By the end of 1981, 8.4 million units had been sold: 6.7 million by Atari, 850,000 by Intellivision (Mattel) 700,000 by Odyssey (Magnavox) and 150,000 by others. Commodore chose to ignore the game market, happy in supplying Atari with its semiconductor devices, primarily the 6502 chip. In late 1981, however, Commodore introduced the VIC 20 color computer for \$299. Atari, Texas Instruments and Timex/Sinclair also introduced computers under \$500. In 1982 Texas Instruments and Commodore started selling through the mass merchandisers; volume production drove down manufacturing costs and a price war developed. As prices fell by as much as 50%, volume exploded. Commodore further expanded its market share after it introduced the Commodore 64 (at \$599) in the summer of 1982; VIC 20 sales were then running 50,000 per month. By year end, both the VIC 20 and Texas Instruments' TI99/4A were selling at \$150 retail. Over 2 million in-home computers were shipped in 1982 with worldwide industry sales breaking the \$1 billion dollar mark; 85% of these sales were in the U.S. Despite a severe recession, the market responded very positively to lower prices, mass merchandising, and available and inexpensive software.

By year-end 1982 the home computer market looked radically different from a year earlier. Atari, which was the clear winner in 1981 with its 400/800 series, was overtaken by Commodore's VIC 20:

Table B-2  
Installed Base of Home Computers



Source: Future Computing, Inc., Dec. 1982



Commodore was estimated by Future Computing to hold a 27% U.S. market share at year-end, followed by Texas Instruments' 21%, Atari's 13% and the TRS 80's 6% share. By the end of the first quarter of 1983, with Commodore 64 volume increasing and the sale of the 1 millionth VIC 20 (lowered in April 1983 to \$99 retail), Commodore's U.S. market share had increased to 37%.

The continued increase in Commodore shipments and the problems of Atari and Texas Instruments (see following section) led Future Computing to make the following Spring 1984 projections:

Table B-3

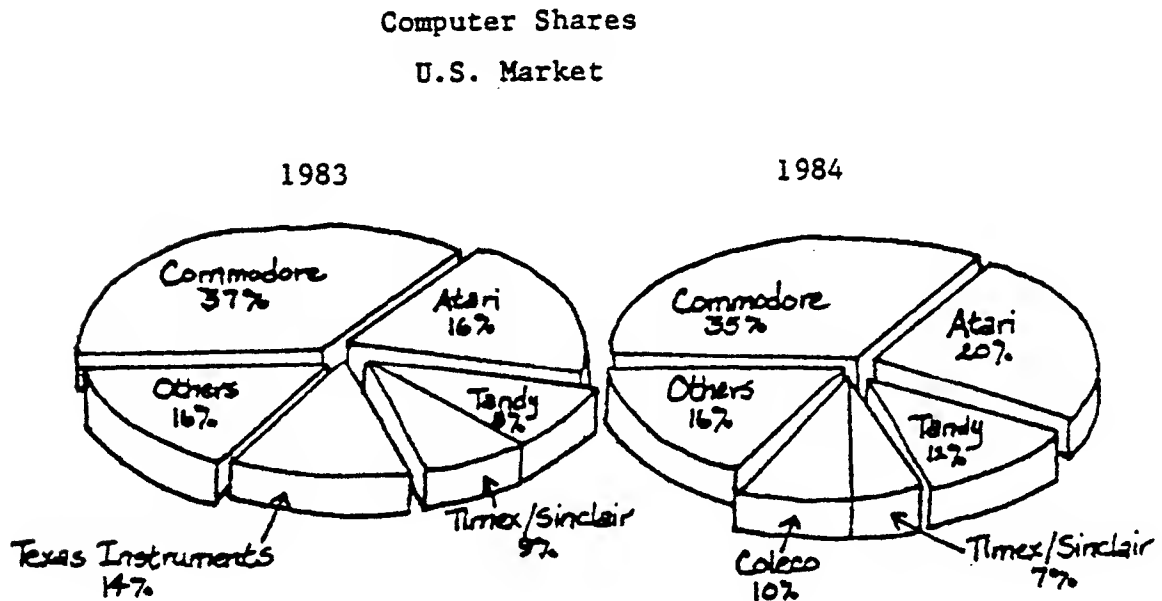
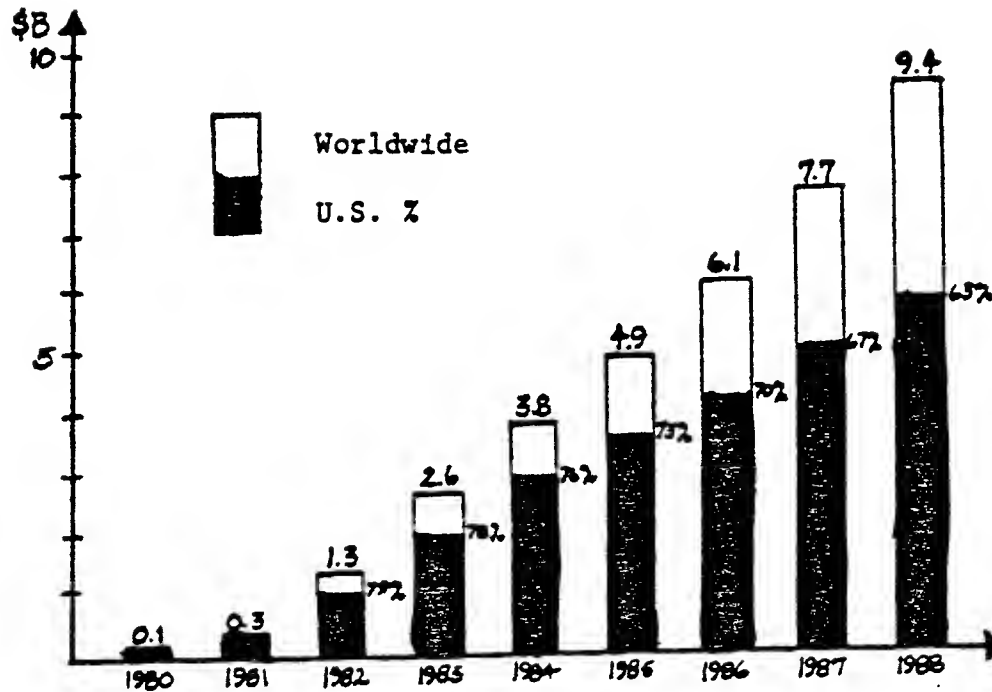


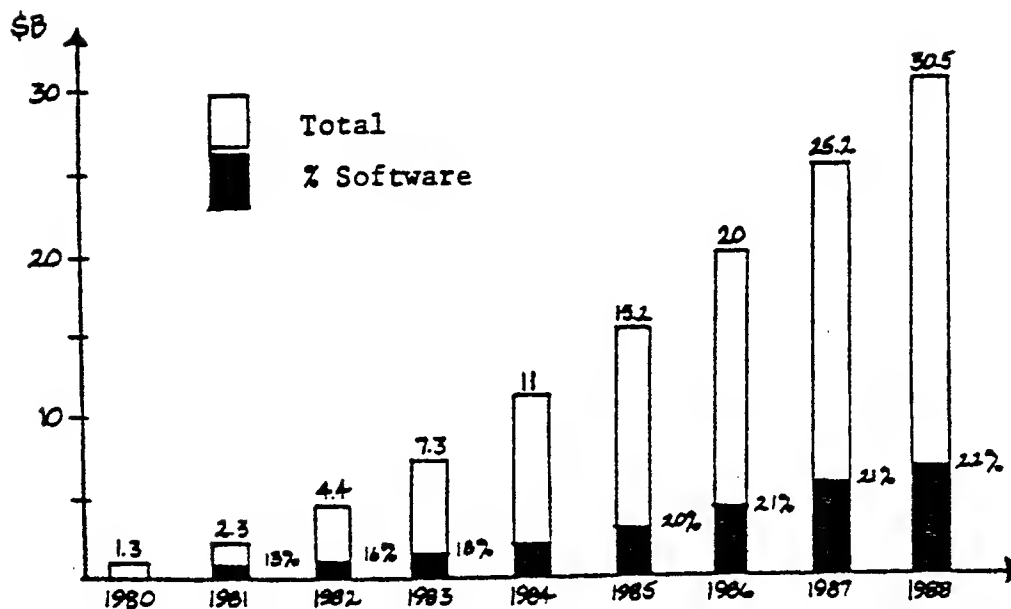
Table B-4  
Worldwide Home Computer  
Hardware Market  
(Retail Value)



Source: Future Computing Inc.

Table B-5

OFFICE PERSONAL COMPUTER MARKET  
(U.S. Retail Value)



Source: Future Computing Inc.

In 1983 two participants in the lower end, Texas Instruments and Atari, ran into well-publicized difficulties. Atari didn't reduce its prices in tandem with TI and Commodore. Without an internal supply of chips and with its higher manufacturing costs the company was unable to match the price cuts. Also, its two year old machines had acquired a "game" image; as the market perceived a functional role of the home computer, Atari's market share dropped from 20% in 1981 to 13% in 1982. The major software investment in games had to be written off and the company was slow to come out with any new machines. The Atari 400 was not expandable and was the only machine in its class without a typewriter type keyboard. Its big product announcement in 1982 was the super-game system (5200) at a time when 30% of home computer buyers were people who already owned a video game.

In 1983 Atari's sales plummeted and the company announced major losses due both to the sale of hardware below cost and the writeoff of obsolete inventory. It also announced that it would move its assembly to Taiwan from California. However, there is little Atari can do to alleviate the problem of not having an in-house semiconductor capacity. The firming in the semiconductor business created even more problems. Atari did not drop out of the market; the company introduced four new computers and it phased out the 400/800 line. Only the 800 XL was a success. The company also announced that its software division will produce programs for the VIC 20 and Commodore 64, a tribute to the growing in-home base of Commodore's machines. The company is still not profitable but hopes to break even in 1984.

In June 1983, Texas Instruments announced it would lose about \$100 million in its second quarter on its micro-computer operations. At the beginning of 1982 it was sharing the market lead with Commodore, and throughout 1982 both companies took turns lowering retail prices. In February 1983, a shock hazard in the 99/4A's power transformer forced TI to halt shipments for about a month. In April, when Commodore lowered the VIC 20 retail price to \$99 (wholesale \$79), TI didn't follow. Analysts suggest that TI's \$150 retail price (\$99 wholesale) was already breakeven compared to Commodore's \$55 cost. In June the TI retail price was finally lowered to \$99. TI had planned to introduce a new model, the 99/8, at the May computer shows but failed to do so. By year-end 1983, Texas Instruments had withdrawn from the market and wrote off almost \$500 million.

With both Atari and Texas Instruments losing money in this market, and with Commodore's margins increasing, the latter had a great advantage in being the lowest cost producer. The price wars would appear to be over, with TI out of the market, Atari unprofitable, and with Commodore not planning any new price cuts. It should be noted that Texas Instruments began the price cutting back in August 1982 in order to create demand for its product which was lacking in available software.

In May 1983, Coleco introduced the Adam home computer with a new marketing strategy. Instead of selling a basic home microcomputer and offering peripherals, the company "bundled" the processor, printer and tape drive for about \$700 retail. Coleco rushed the product to market in order to make the 1983 Christmas season. Unfortunately, the Adam was not properly tested and for almost six months (until the Spring of 1984) Adam was best noted for its high return rate. Coleco, as a result, posted large losses from its computer segment of its business and does not expect to earn a profit before year-end.

In November 1983, IBM entered the home market with a high-end \$1300 machine. To date, the initial acceptance has been poor. Both Coleco and IBM failed to grasp one of Commodore's major ingredients for success, a low initial entry price (i.e. \$200 for the C-64 CPU).

The market does not seem to be saturated. The U.S. marketplace alone consists of 85 million TV households. The growth in cable and other services has accelerated the need for some kind of in-home computer. In addition, computer literacy is becoming part of the school curricula. Commodore, Apple and Atari realized this early and have been donating systems to schools since 1980. The price of \$500 - \$1,000 has also enabled schools to add many units nationwide.

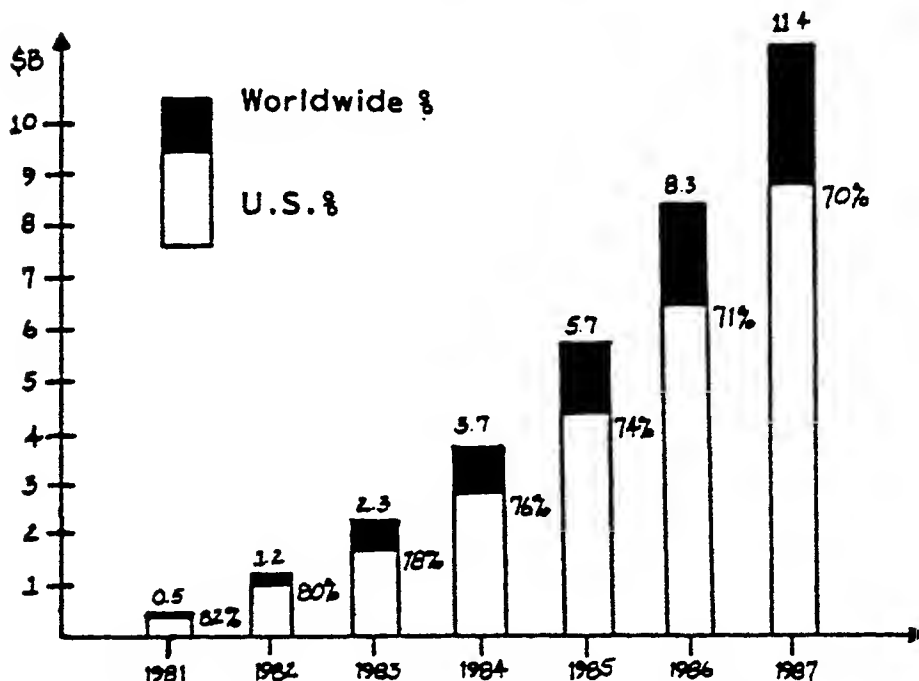
Analysts have defined the target market in the U.S. as 30 million households with the following demographics: Households having more than \$18,000 of income and children 4-18, or households with more than \$18,000 of income, a family head 21-35 and no children over 3. Only 7 1/2 million home computers have been sold in the U.S. (excluding computer literacy products below the VIC-20, but including 25% of Apple and IBM PC sales) through 1983. In addition, some proportion of the remaining 55 million U.S. households are also potential users, not to mention the approximately 100 million households in Western Europe. Penetration levels to date have been lower in continental Europe than in the U.S. while in England it has been slightly higher than in the U.S..

Moreover, the facts suggest that users are currently satisfied with most of the products. A most comprehensive Yankee Group Consumer Study issued in the Fall of 1983 indicated that 61% of consumers were completely satisfied and 31% were somewhat satisfied with their systems. Purchasers sought improvement in the following areas: peripheral availability, peripheral prices, software selection, and processing power. Intended uses in order of importance were entertainment/games, education/learning, programming, home budgeting/management, word processing and business at home.

## Software Market

The software market (both in-home and small business) is expected to top \$11 billion worldwide by 1987:

Table B-7  
Worldwide Personal Computer Software Market  
(Retail Sales)



Source: Future Computing, Inc. October 1982

Software, in both quantity and quality, is important in determining the success of personal computer hardware manufacturers. Buyers in all computer price ranges are concerned about both current and future software availability. They have been proven more likely to choose the hardware which is in widespread use on the assumption that software will grow for those units. Microcomputer software generally sells in terms of 3 units of software per year for each hardware unit sold. It is a circular relationship in that the existence of software expands the user base and a large user base attracts software writers.

## Summary

The personal computer market is highly competitive, with over 200 manufacturers worldwide. The high end (small business/professional) is dominated by IBM, Apple, Tandy and Commodore. The explosive U.S. market expansion is expected to continue at least throughout the 1980's with 40-50% growth per year generally forecast. The markets outside the U.S. are less developed but offer equally rewarding opportunities. Commodore's dominance in the European marketplace offers it opportunities there that Apple enjoyed in the U.S. two years ago.

The lower end (in-home/educational) is now dominated by Commodore, Atari and Tandy. While price competition has been fierce in the low end, it appears to have ended with TI's exit from the market. Apple, IBM, and Coleco have all introduced more expensive market entries. The high end may be the next arena for this type of competition as the 200 or so participants battle for market share.

With its broad product line, European stronghold and its ability to lead the industry with lower priced, feature rich products, Commodore should maintain its significant and profitable share of the worldwide microcomputer hardware and software markets.



# FIVE LEADING MICROCOMPUTER VENDORS IN EUROPE

(INSTALLED BASE)

COUNTRIES

RANKED BY MARKET SIZE

Länder nach Rang	Nr. 1	Nr. 2	Nr. 3	Nr. 4	Nr. 5
England	C	A	TD	HP	Vic
Deutschland	C	A	HP	TD	TA
Frankreich	A	B	C	Oliv	TD
Italien	Oliv	C	A	HP	TA
Holland	TD	C	A	HP	Exi
Schweden	Lux	C	A	HP	Fac
Spanien	C	A	HP	Oliv	Phi
Belgien	A	TD	C	HP	Phi
Schweiz	C	A	HP	Vic	TA
Österreich	C	A	HP	TA	Phi
Dänemark	A	Reg	Lux	C	HP
Finnland	Reg	HP	C	A	Nok
Norwegen	C	HP	A	Osb	Lux

A = Apple

B = Bull

C = Commodore

Exi = Exidy

Fac = Facit

HP = Hewlett Packard

Lux = Luxor

Nok = Nokia

Oliv = Olivetti

Osb = Osborn

Phi = Philips

Reg = Regen Centralen

TA = Triumph Adler

TD = Tandy

Vic = Victor

SOURCE:

IDC 3/31/84

UNITS

COMMERCIAL AND BUSINESS SYSTEMS

PC MARKET  
GERMANY  
SHIPMENTS - 1983

In 1983 82,000 professional microcomputers were shipped in Germany - in a price range in excess of DM 4500

Ten vendors account for 80% of total shipments

Market Share of 1983 shipments

1. Commodore	25,5%
2. Apple	16,7%
3. Hewlett Packard	9,8%
4. Tandy	8,8%
5. Triumph Adler	5,1%
6. IBM	4,8%
7. Victor/Sirius	4,0%
8. Sharp	2,8%
9. Kontron	2,7%
10. Osborne	2,3%
Restliche Anbieter (50)	17,5%

Other Vendors (50) 17.5%

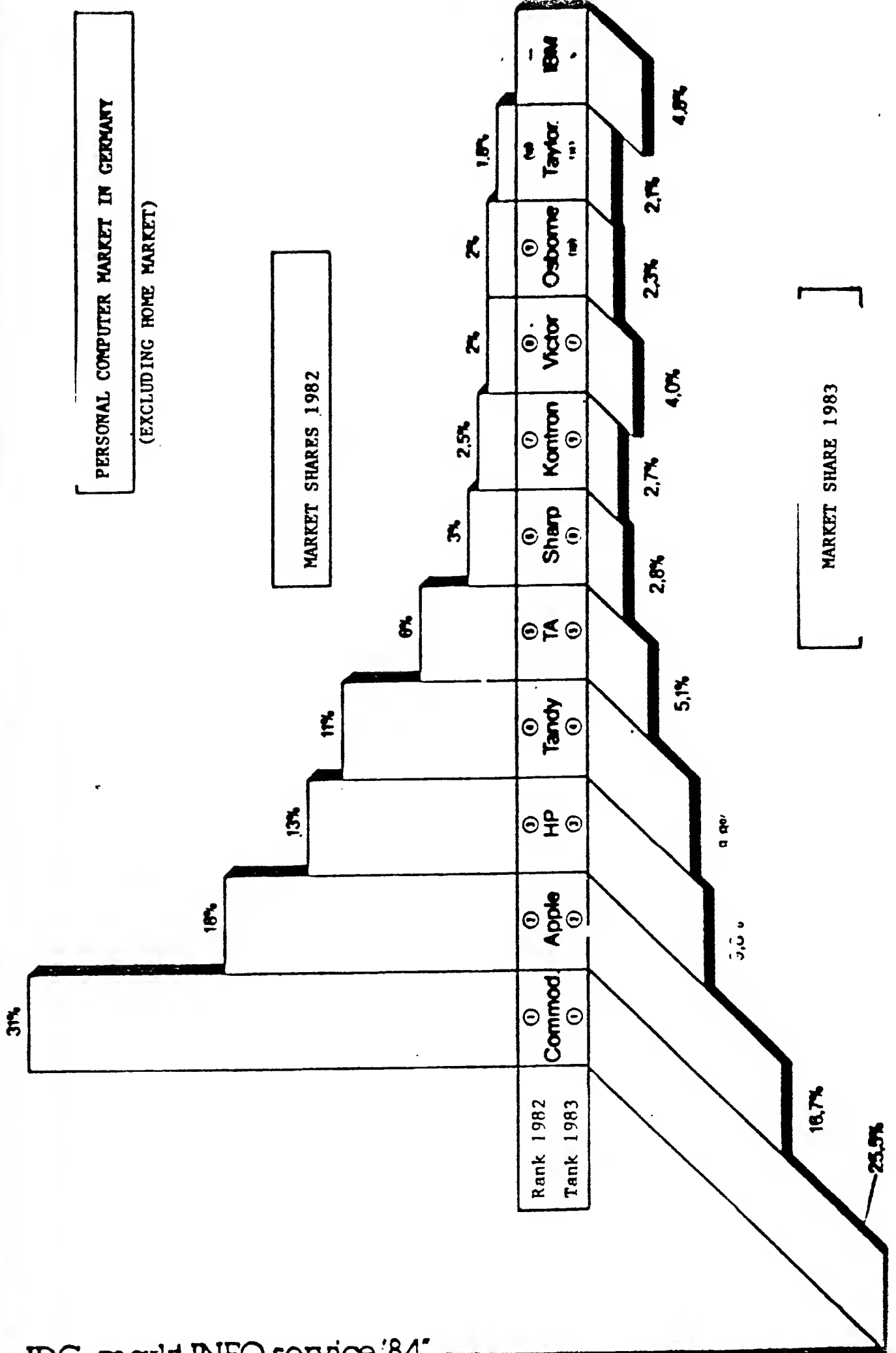
Two thirds of all shipments were commercial and business systems. One third education systems.



PERSONAL COMPUTER MARKET IN GERMANY  
(EXCLUDING HOME MARKET)

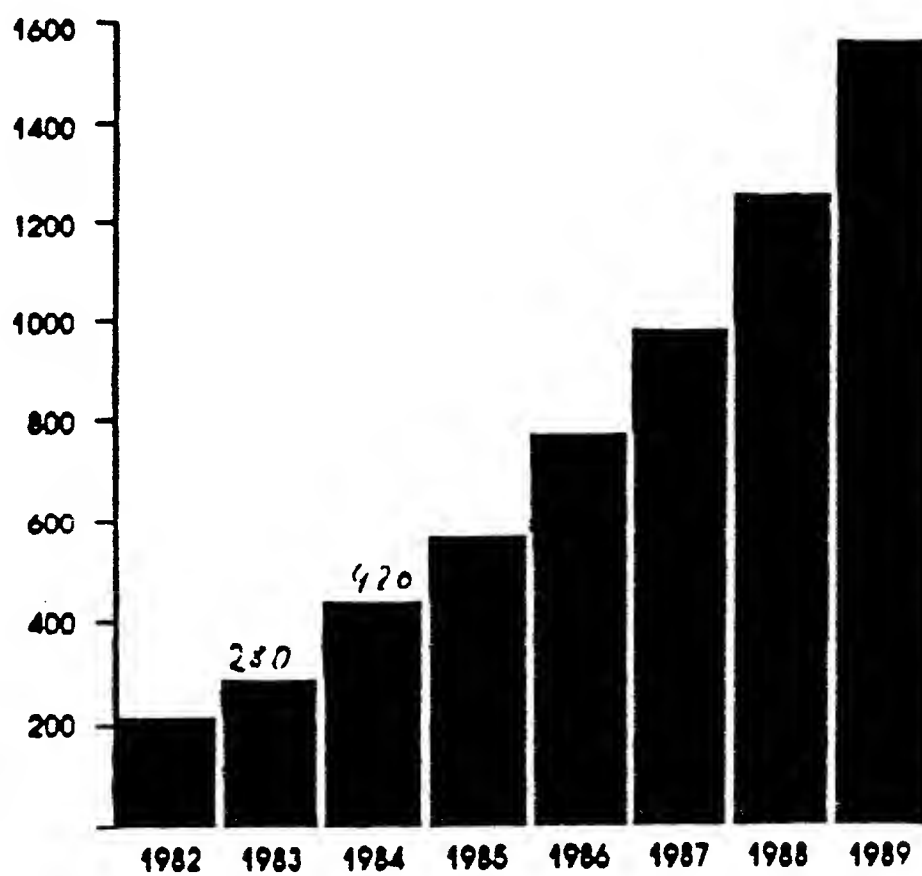
MARKET SHARES 1982

MARKET SHARE 1983



DEVELOPMENT OF WESTERN EUROPE BUSINESS  
AND PROFESSIONAL MARKET

(000) UNITS



MARKET BOOM CAUSES GOLD FUSH MENTALITY

● VENDORS INCREASED AGAIN

● HANNOVER FAIR      1982: 140  
                                 1983: 220  
                                 1984: 250

● USA; 350 VENDORS

● JAPANESE NOT YET FULLY REPRESENTED

● NEW INDUSTRIES IN THE MICROCOMPUTER ENTOURAGE.

● SOFTWARE

● PERIPHERALS

● ACCESSORIES

● MAGAZINE/BOOKS

● TRAINING CENTERS AND EDUCATIONAL SOFTWARE

● PURCHASING AND CONSUMER GUIDES/REFERENCES.

FOR EACH DM OF HARDWARE SALES IN 1983 MICROCOMPUTER  
GENERATED ADDITIONAL SALES OF:

DM .42 SOFTWARE

DM .25 PERIPHERALS

## COMPANY ANALYSIS

### Company History

Commodore was founded by Jack Tramiel in Toronto, Canada in 1958 as a typewriter dealer. In 1959, the company began marketing mechanical adding machines and in 1960 it purchased its first assembly plant in Germany. In 1962 Commodore became a public company and, to support its growing sales, accepted a line of credit from a finance company called Atlantic Acceptance. In 1965 Atlantic Acceptance collapsed; Commodore's financial condition was seriously impaired because it had \$400,000 on deposit at the time. There were several allegations that Commodore benefitted from the illegal activities within Atlantic Acceptance: both companies had the same Chairman. In the end, no charges were placed against any members of Commodore's management. To alleviate its financial problems, Commodore sold the German plant to Litton Industries. Irving Gould, a Toronto financier, became its new Chairman and acquired a major equity position.

The collapse of Atlantic Acceptance is a source of continued bad press for the company. Barron's, in a March 2, 1981 article, discussed the then sixteen year old incident as having relevance to the present company. Forbes, in an otherwise favorable January 1983 article also mentioned the incident. It implied that despite the company's recent success, it is doomed to failure because of alleged improprieties by the company's former Chairman eighteen years ago.

In 1967, Commodore was named exclusive marketer of Casio electronic calculators and also introduced its own electronic calculator, the AL 1000 (price \$1,495). These products replaced the mechanical adding machine line and provided the base from which Commodore expanded into smaller mass-marketed calculators. In 1971, the C108 calculator was introduced with a price of \$199.95. This was followed by the world's first battery-powered hand calculator (produced for Commodore by Bowmar).

In 1974, increasing competition in the U.S. caused Commodore to shift its marketing emphasis to Europe where it had retained its distribution system from its adding machine days. Within two years it achieved the largest share of the calculator markets in the United Kingdom, Germany, France and Scandinavia. By 1975, the company was designing and producing its own products.

In 1976, the company decided to integrate backward and acquired MOS Technology. With MOS, Commodore acquired the 6502 microprocessor. This acquisition was followed by Optical Diodes, Inc. and Frontier Manufacturing Co. (makers of CMOS LSI devices and liquid crystal displays).

In 1977 a prototype of a stand alone personal computer, called the PET, was introduced by Commodore. Employing a proprietary 6502 microprocessor, it was well received. Commodore continued to concentrate its marketing efforts in Europe where it maintains a dominant market position. Although the PET was sold in the United States, Commodore did not concentrate on the U.S. market until late

1980 when it introduced the VIC 20. Commodore also decided to market these machines through mass merchandisers, pricing them only slightly higher than video machines. In 1982, Commodore introduced the Commodore 64, new business systems and a broad line of peripheral devices and software. The success of this strategy is evidenced by the numbers in the next section.

In January 1984, Commodore entered a new phase in its corporate existence. Jack Tramiel resigned as President to pursue other interests and a new professional management team has been assembled. In addition, the company introduced new home computers based on proprietary semiconductors and new business systems based on Intel and Zilog technology.

## Current Company Profile

### Computer Systems:

The current microcomputer line includes the Super PET, PET 64, PET 4032, CBM 8032, VIC 20, Commodore 64 and Plus 4. Each unit contains an MOS designed and built microprocessor, random access memory (RAM), read only memory (ROM), keyboard and power supply. The company also markets software and various peripherals including floppy disk drives, printers, joysticks, modems and monitors.

The PET series includes built in monitors, typewriter style keyboards, and separate calculator/numeric keypads. They contain 18K of ROM programmed in Basic 4.0. The PET is marketed for personal and educational applications.

The CBM series is similar to the PET but more sophisticated. They have expandable (to 256K) memories, several languages and high resolution color graphics. They are marketed for business applications.

The VIC 20 was Commodore's first mass produced home computer. It is an expandable color computer system which connects to any television set or monitor. It features 5K of RAM, a full size typewriter keyboard and system circuitry which permits interfacing with program/memory cartridges, joysticks and modems. It is designed for home use as a game, personal or educational tool. It is expected to be discontinued this summer.

The Commodore 64 has the same basic keyboard as the VIC 20 but features 64K RAM and 20K ROM. It is used primarily for personal, educational, or professional purposes. A portable model has been introduced for the professional market. Just under 3 million 64's have been sold worldwide.

The Commodore Plus 4 features 64K RAM (60K user available) and four built-in integrated productivity programs: word processing, data base management, spread sheet and graphics. It is intended for the professional home and small business market.

## Semiconductor Components

The Company manufactures microprocessors, single chip microcontrollers and proprietary logic circuits, which include Random Access Memory (RAM) and Read Only Memory (ROM) chips. Although in prior years significant quantities of chips were sold to third parties, in fiscal 1983 the Company utilized all of its internal chip production. The semiconductor group also manufactures Liquid Crystal Displays.

The Company manufactures several types of microprocessors, including the 6502, believed to be the most widely used 8 bit microprocessor in the world. The Company's microprocessors have a wide range of applications including small computers, computer peripherals, appliance controllers, telecommunications equipment, process controllers, office equipment and electronic games. The single chip microcontrollers are used in games, data acquisition units, telecommunications and other consumer applications.

The Company has employed two different MOS manufacturing processes: NMOS (single device) and CMOS (complementary). MOS integrated circuits are particularly suitable for applications which demand low cost, low power, small size, and high reliability. They typically consist of many thousand electronic components, e.g. transistors, diodes, resistors, and capacitors, on a small chip of silicon. NMOS is the principal process for applications used in computers. The CMOS process combines PMOS and NMOS technology on a common silicon structure and is used in those applications requiring low power consumption, such as handheld applications and battery driven computers. Currently only NMOS is being manufactured. A metal gate CMOS process was discontinued in order to enhance NMOS capacity. Plans are in place for transferring to manufacturing a new state-of-the-art CMOS process in early 1985.

The large majority of the Company's integrated circuits are assembled in low cost plastic packages. Components are assembled by the Company's subsidiary in Hong Kong and by independent contractors in South Korea.

In fiscal year 1982, the Company began construction of a modern five inch wafer fabricating plant at Costa Mesa, California. In fiscal 1983, this facility achieved high volume production. Further increases in productivity will be realized in fiscal 1984 primarily because of the normal learning associated with state-of-the-art equipment employed in the five inch wafer line. The Company's Valley Forge semiconductor facility has been running at maximum capacity for well over a year. The increases realized are reflected in the table below:

	<u>FY 1982</u>	<u>FY 1983</u>
Wafer Starts		
4" Equiv.	429,000	644,000
Devices	17,000,000	34,900,000

Following Commodore's successful approach of architecturing systems around custom silicon components, a number of new chip designs were released to production for the coming generation of machines. These include:

- 7704 composite timing and system logic device
- 7360 graphics display chip
- 7501 microprocessor for application in low-cost machines
- 7502 dual mode processor chip
- 7005/7006 64K and 128K ROM devices
- 7700 programmable logic array

All of the above have been designed for manufacture in a new, denser, HMOS process. Several existing components have also been re-designed into this process including:

- 7576 color video controller
- 7380 sound chip
- 7701, 7702, 7706 custom logic devices

In fiscal 1983, a plan was developed and implemented to establish a complete vertical manufacturing capability in Hong Kong. After completion of electrically tested wafers in the United States, wafers are received in Hong Kong and then progress through device assembly, testing, printed circuit board insertion and final computer board testing. This substantially reduced manufacturing flow times and costs.

#### Software Development

Commodore produces software for both its computers and peripheral devices. The main elements of software in Commodore computers are kernel, BASIC language interpreter, and application programs. All Commodore computers based on the 6502 contain kernel and BASIC interpreter programs in read only memory (ROM) within the computer. The new PLUS/4 machine will also contain application programs in ROM within the computer. Application programs are also available in plug-in ROM cartridges, and on floppy diskettes and tape cassettes. Commodore develops its own kernel software to take full advantage of the capabilities it designs into its custom integrated circuits. The kernel makes these capabilities available to the applications software that runs in the computer. Applications software is developed both by Commodore and by individuals and organizations under contract to Commodore.

The recently announced Z8000 computer will use software developed by Commodore, and the Coherent (UNIX-like) operating system developed by the Mark Williams Company. Commodore is supplying man-machine interface, and built-in diagnostic software for this machine.

Commodore also develops software for use in its peripheral devices such as printers and disk drives. This software provides the functional capabilities of these devices, and allows them to be more flexible than if all the functions were designed in hardware. This also allows the cost of the peripheral devices to be reduced by limiting the amount of hardware they contain.



## Management

Commodore's rapid growth has been aided by the addition of many qualified professionals in the past few years. Commodore's top management with prior work experience is as follows:

Irving Gould (65), Chairman of the Board since 1966 (CIL). Also a director of Interpool Ltd., a container leasing company and Chairman of Superpack Ltd., a packaging and distribution company.

Marshall Smith (55), President and Chief Executive Officer (CIL). Mr. Smith was formerly President of the U.S. division of Thyssen-Bornemisza, N.V., a multinational conglomerate.

Harald Speyer (43), Vice President (CIL) & Managing Director GmbH. Worked with Commodore in various capacities since 1976.

Robert Gleadow (35), Vice President (CIL) & General Manager, Asian operations. Entire business career with company.

Sol Davidson (65), Vice President & General Manager Commodore Business Machines, Inc. Prior to joining Commodore he was President of the Family Garment Company which he managed for the past 40 years.

Sigmund Hartmann (51), President of Software Division. Prior to joining Commodore in early 1983 he was manager of TRW's Digital Communications Laboratory. Mr. Hartmann had 20 years of service at TRW.

David Harris (47), Senior Vice President, Sales-National Accounts, Commodore Business Machines. Has been with Commodore in excess of 10 years.

Alfred Duncan (39), President & General Manager, Commodore Business Machines Limited-Canada. Prior to joining Commodore in September, 1981 he was Assistant Treasurer of AM International.

Adam Chowaniec (37), Assistant Vice President-Technology. Prior to joining Commodore in 1982 he was Manager - LSI Microcircuits Development at Northern Telecom Ltd.

Donald Greenbaum (33), Treasurer (CIL). Prior to joining Commodore in 1983, he was Vice President of Manufacturers Hanover Trust Company.

John Kelly (46), Corporate Controller (CIL). Prior to joining Commodore in 1982 he was Vice President-Finance, Massey-Ferguson Ltd.

James Dionne (33), Vice President, Distributor Sales, Commodore Business Machines, Inc. Long time employee, joined Commodore's Canadian operations in 1975.

William Murray (33), Assistant Treasurer (CIL). Prior to joining Commodore in 1981 he was Assistant Vice President at Central National Bank of Cleveland.

There are presently over 5,500 employees worldwide. 150 workers in the company's Canadian plant are covered by collective bargaining by the United Steelworkers Union. None of the remaining employees are represented by unions.

## Plant & Equipment

Commodore owns the following plants:

Braunschweig, West Germany: 90,000 square feet - used to assemble all microcomputer system products for the continental European market. Also site of software design and manufacture.

Norristown, Pennsylvania: 60,000 square feet - Commodore MOS/East headquarters - used to manufacture and develop semiconductor components; contains extensive engineering and laboratory areas.

Hong Kong: 220,000 square feet - semiconductor facility; chips are assembled into printed circuit boards and tested before shipment to manufacturing plants.

Corby, England: 150,000 square feet - warehouse and distribution; assembly of 64's mainly for English market.

Commodore leases the following facilities:

West Chester, Pennsylvania: 560,000 square feet - Commodore Business Machines corporate headquarters. Major U.S. distribution center; systems engineering; principal U.S. assembly plant for 64's; Headquarters for Software Division. Lease expires April, 2000.

Scarborough, Ontario: 207,000 square feet - manufacturing facility for housings for the company's computer system products and steel office furniture. Lease expires July, 1986.

Costa Mesa, California: 64,000 square feet - Commodore MOS/West - manufacturing and design facility for semiconductor components; site of 5 inch wafer line. Lease expires July, 1986.

Santa Clara, California: 60,000 square feet - computer system manufacturing plant. Lease expires March, 1991.

Commodore's Japanese operations require a word of explanation. All operations there are performed by several subcontractors, many of which only work for Commodore. These arrangements not only keep Commodore's capital investment low, but their suppliers enjoy normal Japanese payable terms of 90 days; they pass these on to Commodore. Japanese manufacture accounts for the significant portion of peripheral devices sold under the Commodore label. Many of these relationships date back to the early 1970's, making them a secure and loyal supply source.

The equipment needed to manufacture Commodore's product must be state-of-the-art and reliable. The company invested \$52 million in new equipment during the 1980-1982 period, \$30 million in fiscal 1983, and intends to purchase \$50 million in 1984.

Although the initial cost of plant and equipment was \$135 million (through 3/31/84), the replacement cost of the Commodore MOS plant in Valley Forge alone has been estimated by Forbes in a January 1983 article at \$300 million. Commodore believes this to be a conservative figure. No appraisal has been done to determine resale values of the plants on a separate basis.

## Research and Development

Commodore's investment in research and development in fiscal 1983 rose more than 100% for the second consecutive year, to \$37.4 million or 4.4% of sales; from \$17.9 million or 5.9% of sales in fiscal 1982; and \$8.4 million or 4.5% of sales in 1981. These expenditures provide the basis for Commodore's growth as a leader in the microcomputer industry, and allow the Company to take maximum advantage of the various technologies -at both the component and system level - which exist within the Company.

The Company's research efforts are directed primarily toward the enhancement of semiconductor technology for use in its computer systems. Product development work is focused on providing new computer architectures and expanding the range of Commodore's computer and peripheral products as well as cost-reducing existing product. The emphasis is towards rapid turn-around of new designs and the application of leading edge technology regardless of whether this is the result of Commodore research or application of externally procured ideas.

Commodore manages its research and development in a decentralized manner in many centers around the world in order to capitalize on the best talent available and innovation tied to local market factors. However, Commodore's emphasis on developing its products around custom LSI technology using computer aided design tools sourced from its West Chester, PA design center, provides the central focus that enables the Company to control these diverse development programs.

A typical Commodore computer comprises three main elements, the central processing unit or CPU, memory, and peripherals. In the area of CPU's, Commodore has exploited the 8 bit 6502 microprocessor for most of its products. Customized versions of this processor together with proprietary video and sound chips are attributed with the success of products like the Commodore 64. Development work continues on the 6502 family in order to enhance the performance and cost reduce existing product. Development is also proceeding with CPU designs employing CMOS versions of the 6502 family for a new line of low power hand-held machines. At the same time, the need for increased processing capability has led Commodore to begin development of products using 16 bit processors such as the Zilog Z8000 and Intel 8088 family. Development of advanced graphics processors is also continuing and a variety of custom designs were released to production in fiscal 1983.

These include:

- a pair of related parts which generate the master clock for all logic components within a machine,
- a programmable logic array which contains "housekeeping logic",
- a multi-purpose device used to reduce the component count in a number of Commodore products, encompassing a system controller, video controller, display processor and voice generator.

These new chip designs will allow Commodore to field new generations of computers which will provide more computing power at less cost.

Memory costs comprise the single largest element of Commodore product cost. Effort is therefore being expended to design new machine architectures in order to make the most efficient use of available memory. Although Commodore has designed and manufactured its own ROMs for a long time, recently a decision was made to begin in-house manufacture of RAM devices. Initially this will provide Commodore with a degree of strategic independence from the commercial RAM market but it is also the first step towards more advanced in-house technology which is expected to provide significant cost advantage over time. A natural evolution to 256K RAMs will come first followed by custom approaches to memory design. In order to maintain aggressive schedules, Commodore chose to license an existing 64K memory design from Micron while its own in-house development activities in this area gather momentum.

Peripherals include disks, printers and monitors. Although Commodore procures subassemblies for these products, the electronic content is designed in-house and makes use of Commodore semiconductor components. Cost reduction activities on existing products are continuing. In addition work is in progress on new peripherals such as modems, local area network and other telephony related functions. The latter are providing additional need for Commodore to move towards CMOS process technology as well as current NMOS manufacturing capability.

## Marketing

### Europe:

Dating back to the 1960's, Commodore's European network of dealers has enabled it to obtain and retain its dominant market positions in calculators and, subsequently, small business computers. Subsidiaries are located in the United Kingdom, Germany, Switzerland, Italy, Belgium, the Netherlands, Norway, Denmark and Austria. New business oriented products are generally introduced into this marketplace first until unit volume increases enough to reduce manufacturing costs. At that time they are introduced into the more competitive U.S. market. In the current fiscal year European volume accounts for 33% of total sales.

### Far East:

A new and rapidly growing market for Commodore has been Australia where sales have grown to \$42 million annually from a standing start a year and a half ago. Again, Commodore has established itself as a market leader in both price and quality over a broad product line. Its large variety of U.K. - oriented software has been of tremendous value in competing against the Japanese products there.

### U.S. and Canada:

In 1977, Commodore was one of the three original manufacturers of personal computers in the U.S. market along with Apple and Tandy. However, it chose to concentrate on its familiar European markets where the PET was priced at \$1,295 retail versus \$800 in the U.S. The higher profit margin allowed for a more aggressively supported marketing strategy. This policy also allowed Tandy and Apple to dominate the U.S. market. In late 1980, with its strong European base and successful Japanese experience with the VIC 20, Commodore re-entered the North American market. Priced at \$300, its VIC 20 was cheaper and more sophisticated than anything then on the market. Change in advertising agencies and the decision to mass market the VIC 20 through department and chain stores boosted sales from 100,000 in fiscal 1982 to 125,000 per month at its peak. In early fiscal 1983, the Commodore 64 was added to the low end line. The U.S. advertising budget also soared from \$4 million in fiscal 1982 to \$45 million in fiscal 1983; and the number of stores carrying the two machines (including K-Mart, Sears, Toys-R-Us, Montgomery Ward and J.C. Penney) has grown to 10,000.

The list price of the VIC 20 and the Commodore 64 have also been consistently lowered as the market has proven to be extremely price elastic. This elasticity is shown by the present 4 million Commodore machine installed base and the projection of another 3 million installed within 12 months.

### Historical Financial Performance

In the past five fiscal years Commodore's sales have grown 71% on an annual basis. This growth has been worldwide; European sales, primarily in business systems, supported the company in 1979 and 1980. The success of the VIC 20 and Commodore 64 have boosted its U.S. presence and accounted for the bulk of sales growth since 1981. Profits have advanced at even a greater pace, increasing 91% per annum since 1979.

Table C-1 breaks out the geographic and product segments of total sales during the past five fiscal years.

## Company Financial Statements

Exhibits C-1 through C-5 contain the following statements:

- C-1 Five year review of statements of consolidated income
- C-2 Five year review of statements of financial position
- C-3 Ratio analysis - income statements
- C-4 Ratio analysis - balance sheet
- C-5 Cash flow analysis

Commodore's balance sheet is in sound financial shape. Its individual parts, however, reflect its rapid growth and integration efforts. The following discussion highlights major items on these statements.

### Inventory:

Inventory is valued at the lower of cost (FIFO) of market, inclusive of material, labor and overhead. A substantial amount of in-process material is manufactured for inter-company sales; any profit on these is eliminated from the inventory valuation. At 3/31/84 inventories consisted of:

Finished Goods:	\$118,364,000
Raw Material and Work in Process:	133,539,000

Commodore's inventories are higher than most of its competitors as a result of its vertical integration. It not only must have a ready supply of components for final assembly but also the raw materials associated with a wide variety of processes ranging from the manufacture of computer housing to semiconductors. Each year the company writes off all inventory no longer in its product line, a procedure required by the fast-changing technology of the industry. Major strides in controls in the past six months have reduced inventory positions to their lowest levels in relation to sales in over 3 years.

### Taxes:

Commodore's legal domicile is Nassau, Bahamas. The company has enjoyed historically low tax rates (22% in 1983) due to its multinational operations coordinated by a central trading company, Commodore Electronics Limited. Subsidiaries are involved in manufacturing, sales/distribution or a combination of both. Manufacturing subsidiaries earn a relatively low return as the trading company provides a "take or pay" purchase order. Sales/distribution companies earn a greater margin as they commit to specific levels of purchases. The central trading company takes the greatest risks including purchasing, manufacturing (semiconductor as well as systems subassemblies) strategic product positioning, research and development and foreign exchange. As a result, the trading company, which is also Bahamian based, earns the greatest return. As a larger proportion of sales and manufacturing operations have recently been concentrated in high tax countries, the tax rate has increased to a current level of 38%.

## Cash Flow:

As depicted in Exhibit C-5, Commodore International's earnings and depreciation have historically provided a major portion of its cash flow requirements. In 1983 a new 5 year \$60,000,000 revolving credit was obtained from five U.S. banks. The availability of favorable (90-120 day) trade credit from Japanese suppliers is also used to support the company's inventory growth. At 3/31/84 these payables amounted to \$77 million. The availability of \$140 million in lines of credit (\$19 million used at 3/31/84) provide the remainder of the company's cash flow reserves.

## Capital Structure:

At 3/31/84 Commodore International's capital structure consisted of:

Long Term Debt:	\$95,077,000
Shareholder Equity:	\$293,906,000

The company's existing long term debt mainly consists of the \$60 million five year revolving credit to support receivables and inventory and \$30 million in capitalized lease obligations primarily for equipment in its U.S. semiconductor facilities. The company does not have any outstanding public debt issues.

The company's internal cash flow and use of long term bank agreements have precluded the need to access the capital markets. Commodore is currently negotiating \$300 million in worldwide bank facilities of which \$200 million will be in the form of long term commitments. The company first went public in 1962 with a listing on the Toronto Stock Exchange. In 1967 the company changed its incorporation to the Bahamas and was listed on the American Stock Exchange. In 1981 this listing was moved to the New York Stock Exchange.



# EXHIBIT C-1

## Commodore International Limited: Statement of Consolidated Income:

(000's omitted)  
Year Ended June 30

(Nine Months Ended  
3/31/84

	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	
Net Sales 1	\$125,600	\$186,500	\$304,500	\$681,200	\$966,900
Cost of Sales	<u>75,000</u>	<u>103,700</u>	<u>159,100</u>	<u>360,400</u>	<u>610,133</u>
Gross Profit	\$ 50,600	\$ 82,800	\$145,400	\$320,800	\$356,772
Expenses:					
Selling	11,200	25,500	52,400	138,400	110,364
General & Administrative	11,300	14,200	18,100	24,100	25,894
Research & Development	6,600	8,400	17,900	37,400	30,068
Interest	<u>3,200</u>	<u>3,900</u>	<u>6,200</u>	<u>8,000</u>	<u>16,657</u>
Total	\$32,300	\$52,000	\$94,600	\$207,900	\$182,983
Income from Operations	18,300	30,800	50,800	112,900	173,789
Provisions for Taxes	3,800	5,900	10,200	24,900	63,075
Income after Taxes	14,500	24,900	40,600	88,000	110,714
Extraordinary Items	<u>2,400</u>	<u>500</u>	<u>3,700</u>	<u>3,700</u>	<u>-</u>
Net Income	\$16,900	\$25,400	\$44,300	\$91,700	\$110,714
Earnings Per Share 2	.54	.82	1.44	2.98	3.51
Book Value Per Share 2	1.17	2.02	3.48	6.20	9.52

1 The company's audited financial statements are attached and should be read in conjunction with this section for related notes.

2 Adjusted for all stock splits through 3/31/84.

## EXHIBIT C-2

Commodore International LimitedStatements of Financial Position

	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>3/31/84</u>
<u>Assets</u>					
Cash & C.D.'s	\$ 5,100	\$ 9,500	\$ 6,800	\$23,400	\$ 24,300
Accounts Receivable	25,300	48,500	81,500	180,000	258,600
Inventories	36,100	52,800	92,300	326,800	251,900
Prepaid Expenses	600	1,300	1,700	2,500	3,900
Total Current	\$ 67,100	\$111,700	\$182,300	\$532,700	\$538,700
Net Property Plant & Equipment	21,400	32,700	49,600	77,900	93,800
Investment in uncon- solidated subsidiary	-	-	2,000	2,200	2,200
Other Assets	400	700	1,500	1,800	3,000
Total Assets	<u>\$88,900</u>	<u>\$145,100</u>	<u>\$235,400</u>	<u>\$614,600</u>	<u>\$637,700</u>
<u>Liabilities &amp; Equity</u>					
Short Term Liabilities	3,600	6,800	8,000	21,300	19,000
Accounts Payable	14,900	28,500	52,000	246,300	129,400
Other Current Liabilities	10,800	14,900	23,200	60,300	102,100
Total Current	29,100	50,200	83,200	327,900	\$250,500
Long Term Borrowings	24,300	32,000	44,400	92,000	89,100
Other Liabilities	-	1,300	1,900	4,000	\$ 4,200
Total Liabilities	53,400	83,500	129,500	423,900	343,800
Common Stock	3,300	10,100	200	300	300
Retained Earnings	30,900	50,900	95,200	186,900	297,600
Capital Surplus	1,300	600	10,700	13,700	15,000
Treasury Stock	-	-	(200)	(200)	(200)
Cumulative Trans- lation adjustment	-	-	-	(10,000)	(18,800)
Total Equity	\$ 35,500	\$ 61,600	\$105,900	\$190,700	\$293,900
Total Liabilities & Equity	<u>\$ 88,900</u>	<u>\$145,100</u>	<u>\$235,400</u>	<u>\$614,600</u>	<u>\$637,700</u>

# EXHIBIT C-3

## RATIO ANALYSIS

### Income Statement

Fiscal Year Ending June 30

	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	9 Mos. <u>1984</u>
Sales Growth	76.6%	48.5%	63.3%	123.7%	106.0%
Net Income					
Growth	158.6	71.7	63.1	116.7	81.0%
<u>As a percentage</u> <u>of sales:</u>					
Costing of sales	59.7	55.6	52.2	52.9	63.1%
Selling Expenses	8.9	13.6	17.2	20.3	11.4%
General & Administration	9.0	7.6	5.9	3.5	2.7%
Research & Development	5.3	4.5	5.9	5.5	3.1%
Operating Income (Pre- Interest)	17.1	18.6	18.7	17.7	20.5%
Pretax Income	14.6	16.5	16.7	16.6	17.9%
Net Income	12.9	13.4	13.3	13.5	11.5%
Tax Rate	20.8	19.2	20.1	22.0	36.3%
Profitability/Return Ratios:					
Net Profit on Assets	22.1%	21.3%	23.3%	21.6%	19.8%*
Net Profit on Equity	57.6	51.3	52.9	61.8	48.0%*
Earnings Retention Rate	100%	100%	100%	100%	100%*

\*Not Annualized

# EXHIBIT C-4

## RATIO ANALYSIS

### Balance Sheet

(000 omitted in \$ amounts)

Fiscal Year Ending June 30

	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>3/31/84</u>
<u>LIQUIDITY &amp; FIXED CHARGE COVERAGE</u>					
Current Ratio	2.3X	2.2X	2.2X	1.6X	2.2X
Quick Ratio	1.0	1.1	1.1	.6	1.1X
EBIT/Interest Exp.	4.3	5.2	6.1	15.1	12.0X
EBIRT/Int. & Rent Exp.	3.7	4.2	5.2	7.9	7.8X
Working Capital	\$38,000	\$61,500	\$99,100	\$204,800	288,200
Shareholders Equity	35,500	61,600	105,900	190,700	293,900
Debt/tangible Net Worth	150%	136%	123%	220%	117%
<u>Asset/Turnover Analysis (cents of assets per \$ of sales)</u>					
Cash	3.0	3.5	2.7	2.2	2.5*
Receivables	16.2	19.7	21.3	19.2	26.7
Inventories	23.5	23.8	23.8	30.8	26.1
Other Current	.4	.5	.5	.3	.4
Total Current	43.2	47.9	48.3	52.5	55.7
Net Plant	14.2	14.5	13.5	9.4	9.7
Other	.9	.3	.7	.2	.5
Total Assets	58.3	62.7	62.5	62.1	65.9
Net Working Capital	19.8	26.7	26.4	22.3	29.8
Gross Plant	19.4	20.0	18.7	12.9	14.0
Operating Assets	59.6	64.0	64.3	63.1	67.2

(Current Assets - Cash & Gross Plant)

\* Not annulized

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Exhibit C-5

COMMODORE INTERNATIONAL, LTD.

Cash flow  
(\$000's omitted)

	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>9 mos. Ended 3/31/84</u>
Net Income	\$25,400	\$44,300	\$91,700	\$110,700
Depreciation & Amortization	4,600	7,800	14,400	14,100
Deferred Taxes	1,300	600	1,900	200
GROSS OPERATING CASH FLOW	<u>31,300</u>	<u>52,700</u>	<u>108,000</u>	<u>125,000</u>
<u>Gross Operating Cash Needs</u>				
(Inc.)/Dec. A/R	(22,800)	(33,400)	(98,500)	(78,600)
(Inc.)/Dec. Inventory	(16,700)	(30,500)	(234,500)	74,900
(Inc.)/Dec. Prepaid Expenses	(700)	(400)	(800)	(1,400)
SUB-TOTAL	<u>8,900</u>	<u>(20,600)</u>	<u>(225,800)</u>	<u>130,100</u>
<u>Gross Operating Cash Sources</u>				
Inc./Dec. A/P	13,600	23,500	194,300	(115,600)
Inc./Dec. Accruals	2,200	4,500	23,300	(13,200)
Inc./Dec. Taxes Payable	2,100	3,800	13,800	34,500
NET OPERATING CASH FLOW	<u>9,000</u>	<u>11,200</u>	<u>5,600</u>	<u>35,800</u>
<u>Primary Expenditures</u>				
Capital Expenditures	(16,200)	(25,400)	(46,400)	(31,200)
Reduction of LTD	(7,000)	(2,900)	(29,500)	(15,000)
Retirement of Stock/Treasury Stock	<u>—</u>	<u>(200)</u>	<u>—</u>	<u>—</u>
PRIMARY SURPLUS (SHORTFALL)	<u>(14,200)</u>	<u>(17,300)</u>	<u>(70,300)</u>	<u>(10,400)</u>
<u>Other Sources/(Uses)</u>				
Lease Deposits & Other Assets	(300)	(800)	(300)	—
Goodwill	—	—	—	—
Invest. in Fin. Subsidiary	—	(2,000)	—	—
Effect of Exchange Rate Changes	—	—	(8,800)	(8,800)
Disposal	300	700	2,500	3,000
NEED TO FINANCE	<u>(14,200)</u>	<u>(19,400)</u>	<u>(76,900)</u>	<u>(16,200)</u>
<u>New Financing</u>				
Notes Payable	1,300	(400)	12,400	3,700
Inc. LTD	16,600	16,900	78,000	12,100
New Equity	700	200	3,100	1,300
CHANGE IN CASH ITEMS	<u>4,400</u>	<u>(2,700)</u>	<u>16,600</u>	<u>900</u>
Cash Items	\$9,500	\$6,800	\$23,400	\$24,300

Table C-1  
Sales by Geographic & Product Segments:  
During the Past Five Fiscal Years:  
(000's Omitted)

GEOGRAPHIC SEGMENTS

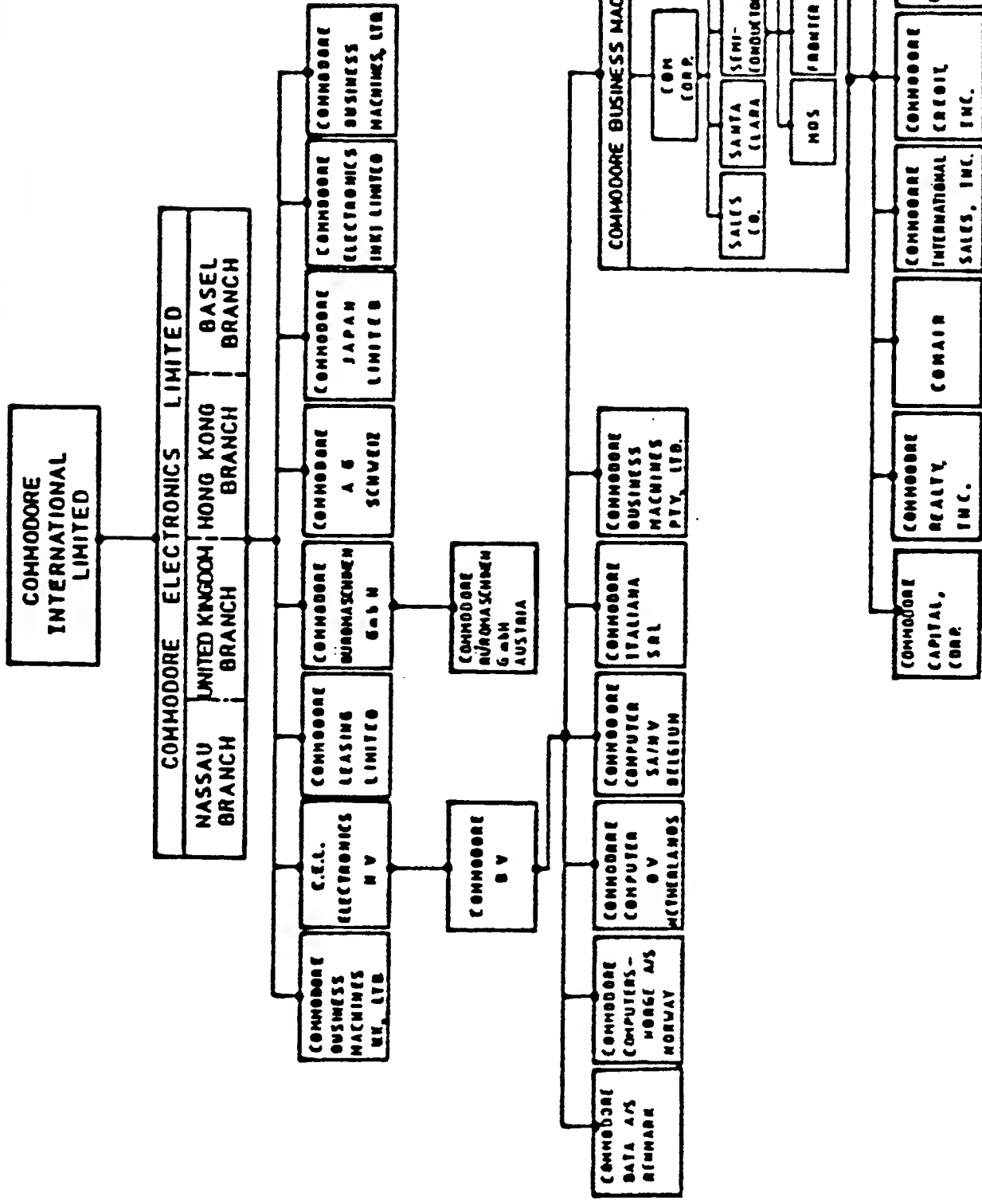
<u>Fiscal Year</u>	<u>Total Net Sales</u>	<u>North American</u>	<u>%</u>	<u>Europe</u>	<u>%</u>	<u>Asia</u>	<u>%</u>
1984*	\$966,905	\$585,282	61	\$319,919	33	\$34,302	4
1983	681,200	500,600	73	155,600	23	25,000	4
1982	304,500	174,300	57	106,000	35	24,200	8
1981	186,500	75,200	40	85,600	46	25,700	14
1980	125,600	45,900	37	60,800	48	18,900	15
1979	71,100	33,600	47	26,800	38	10,700	15

Indentifiable  
Assets (1984 Only)

PRODUCT SEGMENT

<u>Year</u>	<u>Sales</u>	<u>Computer Systems</u>	<u>%</u>	<u>Consumer Products</u>	<u>%</u>	<u>Semiconductor Components</u>	<u>%</u>	<u>Office Equipment</u>	<u>%</u>
1983	\$681,200	\$653,500	96	\$ -0-	-	\$10,100	1	\$17,600	3
1982	304,500	228,200	75	4,000	1	59,800	20	12,500	4
1981	186,500	132,500	71	8,200	4	34,900	19	10,900	6
1980	125,600	82,800	66	11,100	9	18,900	15	12,800	10
1979	71,100	34,400	48	15,900	23	10,000	14	10,800	15

\* Nine months ended 3/31/84




1985 JUNE 9/10103

**Commodore International**

COMMODORE INTERNATIONAL LIMITED  
INCOME STATEMENT HIGHLIGHTS

FISCAL 1984  
(MILLIONS)

	1ST QTR	2ND QTR	3RD QTR	9 MONTHS
NET SALES	<u>\$209.3</u>	<u>\$431.4</u>	<u>\$326.2</u>	<u>\$966.9</u>
GROSS MARGIN	79.5	159.2	118.0	356.7
OPERATING EXPENSES	38.6	73.0	54.7	166.3
OPERATING INCOME	40.9	86.2	63.3	190.4
INTEREST EXPENSE	4.6	7.0	5.0	16.6
PRE-TAX INCOME	36.3	79.2	58.3	173.8
INCOME TAXES	12.0	29.1	22.0	63.1
NET INCOME	<u>\$ 24.3</u>	<u>\$ 50.1</u>	<u>\$36.3</u>	<u>\$110.7</u>

 Commodore International



# COMMODORE INTERNATIONAL LIMITED

## NET SALES

FISCAL 1984  
(MILLIONS)

	<u>1ST QIR</u>	<u>2ND QIR</u>	<u>3RD QIR</u>
U.S..	\$110	\$232	166
CANADA-SYSTEMS	19	26	22
U.K.	28	69	27
GERMANY	18	40	43
NORTHERN EUROPE	9	19	19
ITALY	2	16	30
CEL BASEL	10	9	9
AUSTRALIA	9	16	7
STEEL & COMPONENTS	4	4	3
	<u>\$209</u>	<u>\$431</u>	<u>\$326</u>

 Commodore International


# COMMODORE INTERNATIONAL LIMITED

## PRODUCT SALES

THREE MONTHS ENDED MARCH 31, 1984 & DECEMBER 31, 1983

(MILLIONS)

	<u>2ND QTR</u>	<u>3RD QTR</u>
C64	\$166.8	\$128.8
1541 DISK DRIVE	99.6	54.4
OTHER CONSUMER HARDWARE	110.3	99.9
SOFTWARE	25.7	19.9
PET SYSTEMS	24.9	19.2
STEEL AND COMPONENTS	4.1	4.0
	<u>\$431.4</u>	<u>\$326.2</u>

 Commodore International

COMMODORE INTERNATIONAL LIMITED

BALANCE SHEET HIGHLIGHTS

FISCAL 1984

(MILLIONS)

	<u>6/30/83</u>	<u>9/30/83</u>	<u>12/31/83</u>	<u>3/31/84</u>
CASH	\$ 23	\$ 11	\$ 26	24
ACCOUNTS RECEIVABLE	180	190	285	259
INVENTORIES	327	399	288	252
PROPERTY, NET	78	81	84	94
JAPAN PAYABLES	197	176	109	77
SHORT-TERM BANK DEBT	16	76	68	19
LONG-TERM BANK DEBT	63	66	66	53
LEASES AND MORTGAGES, INCLUDING CURRENT PORTION	34	35	37	42
SHAREHOLDERS' EQUITY	191	214	258	294

COMMODORE INTERNATIONAL LIMITED

ACCOUNTS RECEIVABLE

MARCH 31, 1984

(MILLIONS)

DAYS OUTSTANDING

	NOT YET DUE	0-30	31-90	91+	TOTAL
U.S. SYSTEMS	\$ 4	\$101	\$ 14	\$ 26	\$145
CANADA	0	12	10	5	27
U.K.	17	6	5	1	29
GERMANY	20	1	1	0	22
OTHER EUROPE	25	11	11	2	49
AUSTRALIA	3	2	1	0	6
MISC	4	3	1	0	8
	<u>\$ 73</u>	<u>\$136</u>	<u>\$ 43</u>	<u>\$ 34</u>	<u>\$286</u>

OTHER RECEIVABLES


(6)

RESERVE FOR DOUBTFUL ACCOUNTS

(21)

TOTAL

\$259

 Commodore International

# COMMODORE INTERNATIONAL LIMITED

## INVENTORIES

MARCH 31, 1984

(MILLIONS)

	<u>R.M. &amp; WIP</u>	<u>FINISHED GOODS</u>	<u>TOTAL</u>
U.S.	\$ 42	\$ 81	\$123
CANADA	3	16	19
U.K.	10	11	21
GERMANY	13	30	43
OTHER EUROPE	0	10	10
AUSTRALIA	0	11	11
HONG KONG	62	0	62
JAPAN	28	1	29
U.S. SEMICONDUCTOR	5	0	5
CEL BASEL	2	1	3
SUB-TOTAL	\$165	\$161	\$326
ADJUSTMENTS	(32)	(42)	(74)
TOTAL	\$133	\$119	\$252


 Commodore International

COMMODORE INTERNATIONAL LIMITED  
FINISHED GOODS INVENTORIES

MARCH 31, 1984

(MILLIONS)

CONSUMER HARDWARE	\$56
SOFTWARE	12
PET SYSTEMS	46
ACCUAL FOR ANTICIPATED RETURNS	3
STEEL & COMPONENTS	1
	<hr/>
	<u>\$118</u>

 Commodore International

comodore international limited  
operating statement  
march 31, 1984

	cill	cel*	ctm, inc.	canada	u.k.	germany	oth. europe	hong kong & taiwan	japan	australia	adjustments	total
Trade Sales	0	27404	508524	76756	123459	101236	95224	1090	1037	32175	0	966905
Interco Sale	0	964142	102652	22281	106100	133203	357	0	315999	0	-1644734	0
Total Sales	0	991546	611176	99037	229559	234439	95581	1090	317036	32175	-1644734	966905
Cost of Sale	0	803802	471462	78263	188082	208337	67243	2268	315190	19473	-1623907	610133
Gross Margin	0	107744	139714	20774	41477	26102	28338	-1178	1046	12702	-20747	356772
Operating Exp: Advt & Miso	0	754	33987	9416	8298	4807	6366	0	0	3197	0	66825
Sell & Del	0	307	20285	9053	2823	3900	4277	43	846	2005	0	43539
Gen. & Adm	3666	6364	7177	1516	1092	1221	1803	79	2014	882	0	25894
R & D	0	15966	12422	0	542	98	76	0	964	0	0	30068
Operating Income/Loss	-3666	84353	65043	789	28722	16076	15736	-1300	-1978	6618	-20747	190446
Int. Exp. Int. Inc.	431	-7357	13095	3984	2459	1591	1273	-181	77	610	2000	17982
Pre-Tax Income	-4088	92928	52748	-3159	26263	14488	14509	-1119	-2042	6008	-22747	173789
Income Tax	0	7	26379	-1595	12721	8874	6029	0	76	2984	7600	63075
Net Income	-4088	92921	26369	-1564	13542	5614	8480	-1119	-2118	3024	-30347	110714

\* includes by & mv.

comodore international limited  
balance sheet -assets  
march 31, 19 1983

	cil	cel*	ctm, inc.	canada	u.k.	germany	oth. europe	hong kong & taiwan	japan	australia	adjustments	total
cash	-5	7739	4254	459	6523	3224	1825	31	173	99		24322
accts rec	150	10305	118201	23499	29558	24460	48038	3	601	4840	-1043	258612
inventories:												
raw mat/wip	0	63691	47232	2782	10470	13079	0	42	28080	0	-31837	133539
fin goods	0	845	80932	16627	10618	29867	10289	0	547	10578	-41939	118364
total invent	0	64536	128164	19409	21088	42946	10289	42	28627	10578	-73776	251903
prepaids	157	78	2547	137	198	168	327	27	57	228		3924
curr assets	302	82658	253166	43504	57367	70798	60479	103	29458	15745	-74819	538761
property:												
cost	111	17056	94264	6652	9977	4309	1398	394	739	336		135236
accum depr	-35	-4768	-29924	-3241	-1645	-1136	-463	-12	-215	-11		-41450
net property	76	12288	64340	3411	8332	3173	935	382	524	325	0	93786
invest- subs	203163	24816	3103	0	0	0	27	0	0	0	-231109	0
other assets	57	1776	2595	24	0	0	130	0	487	89		5158
total assets	203598	121538	323204	46939	65699	73971	61571	485	30469	16159	-305928	637705

\* includes bv & nv.



comodore international limited  
balance sheet -liabilities  
march 31, 1984

	cil	cel*	ctm, inc.	canada	u.k.	germany	oth. europe	hong kong & taiwan	japan	australia	adjustments	total
bank debt	0	960	3000	2363	3201	2815	1603	28	0	5010	0	18980
current liab	0	394	5482	0	0	142	0	0	0	0	0	6018
accounts pay	72	13328	17339	2612	7665	5200	4748	184	77338	920	0	129406
accrued liab	5245	7118	10758	1032	5744	1742	3866	32	450	743	957	37687
income taxes	0	-91	17669	-797	13092	10615	6413	0	80	3864	7600	58445
curr liab	5317	21709	54248	5210	29702	20514	16630	244	77868	10537	8557	250536
l-t debt:												
revolv cred	0	80	47000	3125	2880	0	0	0	0	0	0	53085
mortgages	0	3718	1319	0	0	1069	0	0	0	0	0	6106
leases	0	0	29188	0	0	0	0	0	0	0	0	29188
other	0	389	3691	11	2586	0	21	0	0	0	0	6698
total ltd	0	4187	81198	3136	5466	1069	21	0	0	0	0	95077
leas:current	0	-394	-5482	0	0	-142	0	0	0	0	0	-6018
net ltd	0	3793	75716	3136	5466	927	21	0	0	0	0	89059
deferred tax	0	327	0	1364	2108	405	0	0	0	0	0	4204
interco	4786	-214883	149276	18849	5985	44407	36192	-2146	-44146	1680	0	0
total liab	10103	-189054	279240	28559	43261	66253	52843	-1902	33722	12217	8557	343799
common stock	309	6	767	16774	2	806	367	252	152	57	-19183	309
cont surplus	14952	6957	8619	0	218	0	0	0	0	0	-15794	14952
ret earnings	182510	221930	8209	4430	11260	4171	-2	3254	-396	805	-249161	187310
current p/l	-4088	92921	26369	-1564	13542	5614	8480	-1119	-2118	3024	-30347	110714
translat adj	0	-11222	0	-1260	-2584	-2873	-117	0	-891	56	0	-18891
treas stock	-188	0	0	0	0	0	0	0	0	0	0	-188
total equity	193495	310592	43964	18380	22438	7718	8728	2387	-3253	3942	-314485	293906
total liab & equity	203598	121538	323204	46939	65699	73971	61571	485	30469	16159	-305928	637705

\* includes bv & mv.

comodore international limited  
operating statement - other europe  
march 31, 1984

	austria	belgium	netherlands	switzerland	denmark	norway	italy	total
Trade Sales	5731	6431	12055	8312	7982	6782	47931	95224
Interco Sale	0	215	140	0	0	0	2	357
Total Sales	5731	6646	12195	8312	7982	6782	47933	95581
Cost of Sale	3817	4623	8192	5266	5128	4923	35294	67243
Gross Margin	1914	2023	4003	3046	2854	1859	12639	28338
Operating Exp:								
Advt & Mktg	261	396	693	625	422	458	3511	6366
Sell & Del	198	378	746	608	455	387	1585	4277
Gen. & Adm	210	258	272	254	158	208	523	1083
R & D	0	0	0	0	0	0	76	76
Operating Income/Loss	1245	991	2292	1559	1819	886	6944	15736
Int. Exp.	27	74	92	25	52	198	805	1273
Int. Inc.	-1	0	-2	0	-34	0	-9	-46
Pre-Tax Income	1219	917	2202	1534	1801	688	6148	14509
Income Tax	780	312	533	473	721	300	2910	6029
Net Income	439	605	1669	1061	1080	388	3238	8480

comodore international limited  
balance sheet - assets - other europe  
march 31, 1984

	austria	belgium	netherlands	switzerland	denmark	norway	italy	total
cash	2	225	1033	0	496	68	1	1025
acct's rec	2712	1053	3404	2081	1770	2308	33910	40038
inventories:								
raw mat/wip	0	0	0	0	0	0	0	0
fin goods	817	1535	1598	502	1027	1179	3551	10289
total invent	817	1535	1598	502	1027	1179	3551	10289
prepaids	0	46	76	7	4	7	187	327
curr assets	3531	2859	6111	3470	3297	3562	37649	60479
property:								
cost	140	204	370	320	209	32	115	1398
accum deprec	-44	-35	-186	-137	-23	-18	-20	-463
net property	96	169	192	183	186	14	95	935
invest- subs	0	0	27	0	0	0	0	27
other assets	82	20	0	7	2	0	19	130
total assets	3709	3048	6330	3660	3405	3576	37763	61571

comodore international limited  
balance sheet -liabilities - other europe  
march 31, 1984

	austria	belgium	netherlands	switzerland	denmark	norway	italy	total
bank debt	495	0	0	626	0	0	482	1603
current ltd	0	0	0	0	0	0	0	0
accounts pay	344	179	732	201	632	316	2344	4748
accrued liab	7	440	202	391	34	238	2554	3866
income taxes	902	222	452	570	795	300	3172	6413
curr liab	1748	841	1386	1788	1461	854	8552	16630
l-t debt:								
revolv cred	0	0	0	0	0	0	0	0
mortgages	0	0	0	0	0	0	0	0
leases	0	0	0	0	0	0	0	0
other	0	0	0	0	21	0	0	21
total ltd	0	0	0	0	21	0	0	21
less:current	0	0	0	0	0	0	0	0
net ltd	0	0	0	0	21	0	0	21
deferred tax	0	0	0	0	0	0	0	0
interco	1454	1656	2087	667	778	3956	25694	36192
total liab	3202	2497	4273	2455	2269	3910	34246	52843
common stock	0	27	5	110	55	34	136	367
cont surplus	0	0	0	0	0	0	0	0
ret earnings	58	-87	431	33	132	-769	200	-2
current p/l	439	605	1669	1061	1080	388	3238	8480
translat adj	10	6	-48	1	-42	13	-57	-117
treas stock	0	0	0	0	0	0	0	0
total equity	507	551	2057	1205	1225	-334	3517	8728
total liab & equity	3709	3048	6330	3660	3485	3576	37763	61571

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